

REMARKS/ARGUMENTS

Claims 1-19 are pending in this application. By this amendment, claims 2, 4, 6, 8-15, 17 and 19 have been cancelled without prejudice and purely in the interests of speeding prosecution, claim 1 has been amended, and new claim 20 has been added. No new matter has been added.

By this amendment, the claims rejected by the Examiner under 35 USC 112, second paragraph, have been cancelled without prejudice.

The Examiner has rejected the remaining claims in the application under 35 USC 102(b) or 35 USC 103(a) based on Maynard (US Patent 5,405,337), Grummon (US Patent 6,260,818) or Sieminski et al. (US Patent 6,342,314).

Applicant has amended claim 1 to include the elements of: "a flexible transport tube suitable for use inside a human body as an artificial part of the human gut" and "a two-way shape memory alloy having a coil form" functioning to provide "peristaltic movement". Applicant submits that at least these elements are not taught or suggested by any of the references, either alone or in combination.

More particularly, none of the references describe a two-way shape memory alloy as claimed in claim 1. A two-way shape memory alloy is similarly efficient and responsive both when contracting and when returning to its original shape. This is particularly important in application to artificial parts for the human gut/gastrointestinal tract. None of the references teach or suggest this difference between one-way and two-way shape metal alloys. In focusing on generic shape metal alloys, the references do not consider or suggest applications in which two-way shape metal alloys are more beneficial or are needed. In fact, the references tend to teach away from the present embodiments by

focusing on the one-way properties and applications of shape metal alloys and there would be no motivation to consider two-way shape metal alloys.

Further, both Maynard and Grummon deal with shape memory alloys as a film rather than as a coil form. One of skill in the art would understand that a film shape metal alloy cannot be made two-way. Further, even if possible, a film would not have the same two-way properties as a coil in that the coefficient of contraction of a film would have to be lower than that of a coil because the film is less efficient in returning to its original shape. As such, Maynard and Grummon do not teach a two-way shape memory alloy having a coil shape nor do they suggest the use of a two-way shape memory alloy having a coil shape. Again, by dealing with the benefits of the film shape metal alloy, these references actually teach away from the coil form.

Still further, although the references provide some medical related examples of applications for shape metal alloys, they do not teach or suggest applications for use inside a human body as an artificial part of the gut/gastrointestinal tract and to provide peristaltic movement, as claimed in claim 1. Maynard discloses the use of a film shape metal alloy wrapped around a tube where the tube is a catheter but does not suggest the semi-permanent installation of a tube inside of a human body as an artificial part of the gut/gastrointestinal tract. Grummon deals with a shape memory alloy wrapped around veins or arteries but also does not suggest a flexible tube to be inserted in a human body as an artificial part of the gut/gastrointestinal tract. Lastly, Sieminski et al. is related to a technology for desirably shaping a diffusion tube in a ventilation system for metal-air cells, a technology area that is widely separated from that in the current application.

For the above reasons, Applicant submits that independent claim 1 is now in condition for allowance. For at least similar reasons, as well as the additional features therein,

Serial No.: 11/712,051
Filed: November 14, 2003
Art Unit: 1742

Applicant submits that the dependent claims 3, 5, 7, 16 and 18 are also in condition for allowance.

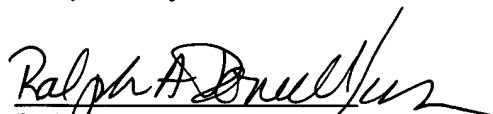
New independent claim 20 is of similar scope or more restricted than independent claim 1 and for at least similar reasons is also believed to be in condition for allowance.

CONCLUSION

In view of the foregoing comments, it is respectfully submitted that the application is now in condition for allowance. Favorable action on this application is respectfully requested. If the Examiner has any further concerns regarding the language of the claims or the applicability of the cited references, the Examiner is invited to contact the undersigned.

Dated: 2.21.2006

Respectfully submitted,



Ralph A. Dowell
Registration No. 26,868
Dowell & Dowell, P.C.
2111 Eisenhower Ave., Suite 406
Alexandria, VA 22314
U.S.A.
Telephone: 703-415-2555
Fax: 703-415-2559

B&P14362-9/NH